# Proposed Project Summary

# L'Anse Warden Electric Company, L'Anse, MI

The Michigan Department of Environmental Quality (MDEQ), Air Quality Division (AQD), is asking for comments from the public on two proposed actions for L'Anse Warden Electric Company (LWEC). The AQD will accept comments on a proposed Permit to Install (PTI) and a draft Renewable Operating Permit (ROP) until the end of the comment period at the hearing on July 26, 2017. We will review all comments before we make a final decision on each proposal.

# What does the company do?

LWEC is located at 157 South Main Street, L'Anse, Michigan. The facility operates a large boiler that is used to generate steam and electricity. The boiler is currently permitted to burn a combination of fuels including natural gas, wood chips, tire derived fuel, railroad ties, wood fines, and bark.

### What is a PTI and why is one needed?

A PTI, commonly referred to as an air use permit, is required for projects that involve installing, constructing, reconstructing, relocating, or modifying most process or process equipment that emits, or may emit, air contaminants. A new PTI is also required if a company wants to make changes to their current air permit.

LWEC's current permit limits the fuels that are allowed to be burned in their boiler. LWEC applied for a new PTI to burn a new fuel. The AQD has reviewed the proposed project, and written new permit conditions including requirements to make sure the project complies with the law.

# What does the company want to do under the PTI application?

LWEC has applied for a temporary permit to allow engineered fuel pellets to be burned in their existing boiler for a period of up to 180 days. The fuel pellets are made of non-recyclable paper, label, and packaging waste. LWEC wants to replace a portion of the current fuel mix that is typically combusted in the boiler with the fuel pellets. To continue to comply with their existing emission limits, and to reduce emissions of acid gases such as sulfur dioxide (SO<sub>2</sub>) and hydrogen chloride (HCl), LWEC is proposing to install an additional type of pollution control, called sorbent injection. The sorbent injection system will directly inject a material into the

boiler's exhaust stream prior to the particulate control device. The material will neutralize a portion of the acid gas emissions.

# What else can you tell me about this change?

LWEC requested a temporary permit so that they can evaluate how the fuel pellets may work as an on-going fuel for the boiler. The requested 180-day period will be used to determine the best operating conditions for the boiler and the new sorbent injection system while burning the fuel pellets. Emissions testing will be performed to measure the actual emissions that will result from burning the fuel pellets.

Compared to the current fuel mix, the fuel pellets are expected to have lower emissions of nitrogen oxides (NOx). The temporary permit requires the new sorbent injection system to be used whenever fuel pellets are burned. This will reduce  $SO_2$  and other acid gas emissions. A small amount of particulate dust emissions will be emitted if a dry material is used in the sorbent injection system. The proposed permit requires the use of a cartridge filter, or an equivalent control device, on the storage silo to minimize the particulate emissions.

The proposed temporary permit contains all of the emission limits and other requirements that are in LWEC's current permit, plus additional requirements related to the fuel pellets and sorbent injection system. There are no changes in the allowable levels of emissions. As a part of this permit application, LWEC was required to show that this project is not subject to state and federal major source permitting requirements.

### What is an ROP and why is one needed?

The operating permits program is a national permitting system required by Title V of the Federal Clean Air Act of 1990 and is administered by each state. In Michigan, these permits are known as "Renewable Operating Permits" and are often referred to as "ROPs."

ROPs are issued for facilities that are considered major sources of air pollutants. Major sources emit or have the potential to emit 10 tons per year of any one hazardous air pollutant (HAP), 25 tons per year of any combination of HAPs, or 100 tons per year of any other regulated air contaminant. Some sources that emit less than this may also be required to get an ROP. LWEC has a potential to emit greater than 100 tons per year of carbon monoxide, NOx, and SO<sub>2</sub>. LWEC is not currently considered a major source for HCl, which is a HAP.

An ROP pulls together all of the air permits issued to a facility, and any other applicable requirements, into a single document. The ROP is designed to allow the public to be better informed about what is required of sources of pollution in their neighborhoods. An ROP does not allow for construction or modifications; a PTI is required for those. New and/or additional monitoring and/or recordkeeping requirements to demonstrate compliance with emission limits and material usage limits may be added to an ROP.

# What is an ROP Renewal and why is one needed?

Each ROP is issued for a fixed term of five years; then, by law, it must be renewed. LWEC submitted a ROP renewal application on February 11, 2015. The ROP renewal includes any changes, such as new permits, consent orders, and federal standards that apply to the facility since the last ROP was issued.

# Will the facility continue to meet the air quality standards?

During the development of LWEC's current permit, the AQD performed reviews to assure that all state and federal health protective standards would be met. LWEC is not requesting increases in any emission limits for the boiler, so the allowable emission rates are not changing. LWEC's current emissions are below what is allowed by their permit.

The projected actual emissions of some pollutants may increase slightly, but remain below the emission limits in the permit. Air dispersion modeling has shown that any increase in actual emissions associated with the project will be less than the Significant Impact Levels. A

change that is less than the Significant Impact Levels is not expected to cause a violation of the health protective air quality standards. These standards were developed by the United States Environmental Protection Agency (USEPA), and are referred to as the National Ambient Air Quality Standards (NAAQS). This project will cause a decrease in actual emissions of several pollutants including NOx and SO<sub>2</sub>, which would potentially result in improvements to the ambient air quality. As such, all air quality standards are expected to continue to be met.

# What is the current air quality in the area?

The facility is located in Baraga County, Michigan. While the AQD does not operate an air monitoring station in Baraga County, we do operate one in Schoolcraft County at the Seney National Wildlife Refuge and the Intertribal Council operates a monitor in Chippewa County in Sault St. Marie. These monitors are representative of the air quality in the Upper Peninsula of Michigan. These sites monitor for particulate matter and ozone and are meeting the NAAQS set by the USEPA.

#### Where can I find more information?

There are two ways to find more information about the PTI application: the Public Participation Fact Sheet has additional details about the project and how it will meet the rules and regulations, and AQD staff can provide additional information upon request. Here are some examples of information you may find useful:

- A summary of the reviews completed by the AQD staff.
- How the project will affect air quality and public health
- A summary of what the proposed permit would require the company to do.
- A summary of the changes that are included in the proposed permit.
- The rules and regulations that apply to the project.
- Example emission calculations.

#### **Summary:**

The AQD has reviewed the PTI application for the requested change and prepared a proposed permit for the facility. If approved, the proposed permit will ensure the facility meets the applicable air quality requirements. Therefore, we are proposing to approve the permit.

The AQD has also reviewed the ROP renewal application and prepared a draft ROP for the facility. After careful review of any relevant comments made during the public comment period and hearing, the AQD may make the appropriate changes to the draft ROP and submit it to the EPA to begin their 45-day review of the permit.

Before the AQD takes action on the proposed PTI and draft ROP, we are requesting comments from the public. The AQD will review all comments received during the public comment period and public hearing and will decide whether to approve or deny the proposed PTI and draft ROP. If approved, the AQD may decide to add or change permit conditions based on the comments.

#### Who can I contact?

For more information about the proposed PTI, please contact Ms. Michelle Rogers, AQD, at RogersM13@michigan.gov or 517-284-6799.

For more information about the Draft ROP renewal, please contact Mr. Ed Lancaster, AQD, at LancasterE1@michigan.gov or 906-250-5124.

